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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,772	07/08/2003	David A. Platts	S-100,626	7995
35068	7590	09/20/2005	EXAMINER	
UNIVERSITY OF CALIFORNIA LOS ALAMOS NATIONAL LABORATORY P.O. BOX 1663, MS A187 LOS ALAMOS, NM 87545			RODRIGUEZ, WILLIAM H	
			ART UNIT	PAPER NUMBER
			3746	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/614,772	Applicant(s) PLATTS, DAVID A.	
	Examiner William H. Rodriguez	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/18/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: *The specification does not provide proper antecedent basis for the claimed limitation “a turbine inlet scroll”.*

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, “*a radial compressor/pump with axially disposed spaced apart fins (see line 5 of claims 4 and 5 respectively)*” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The drawings (Figures 3-5) are objected to because *the lines are not uniformly thick and well defined (poor line quality)*.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

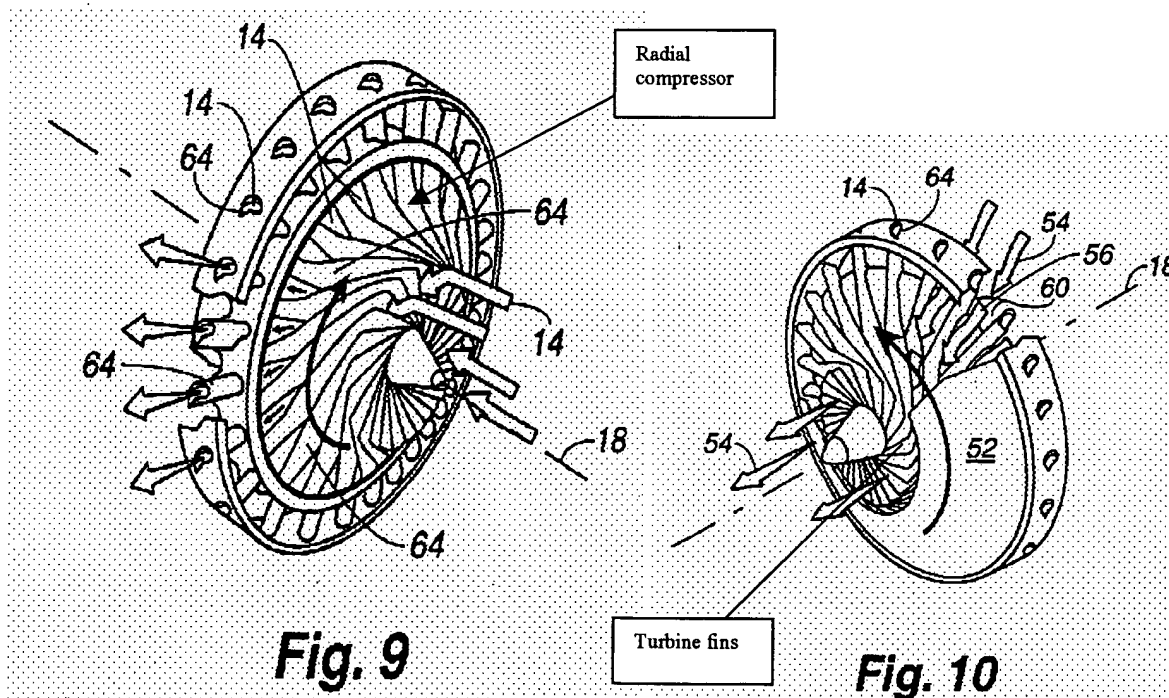
Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by **Platts** (US 6,430,917).

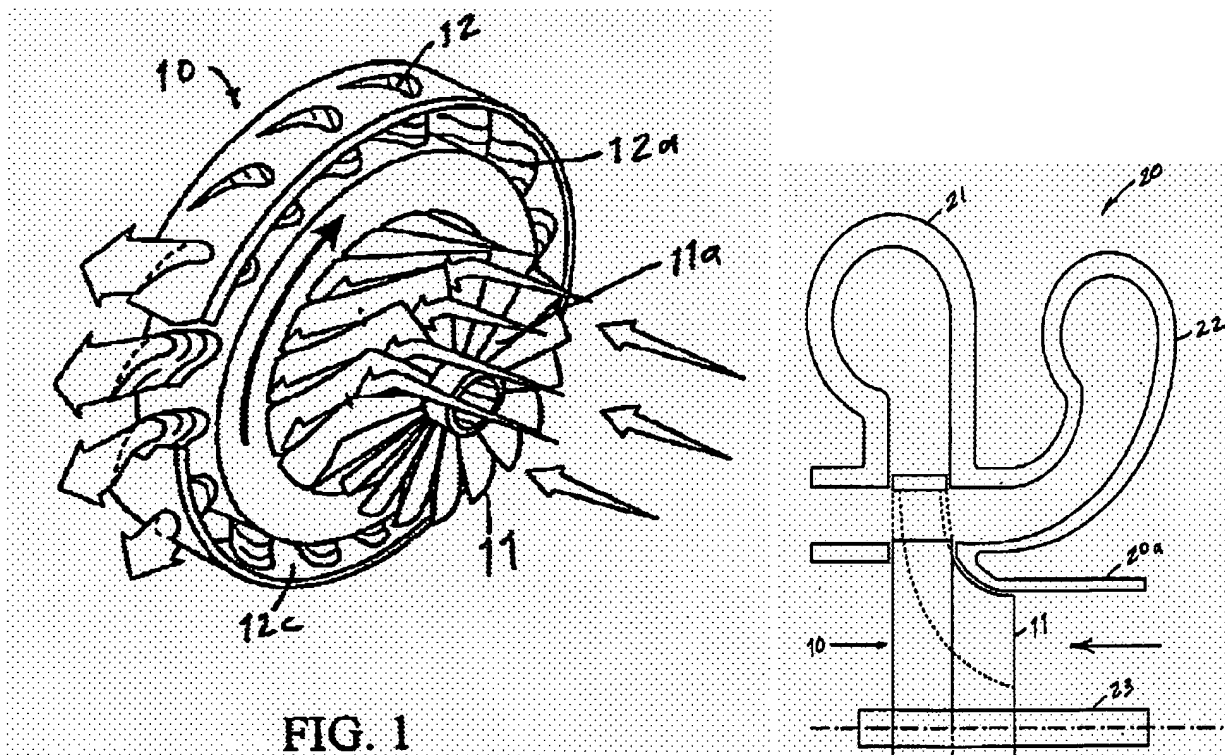


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With respect to claim 1, **Platts** teaches a rotor for use in turbine applications comprising: a radial compressor having radially disposed spaced apart fins 64 forming passages, and a radial turbine having hollow turbine blades 60 interleaved with said fins and through which fluid from said radial compressor flows. See particularly **Figures 9 and 10** of **Platts** above.

With respect to claim 2, **Platts** teaches that the rotor further comprises spaced apart turbine fins for receiving said fluid. See particularly **Figures 9 and 10** of **Platts** above.

5. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by **Platts** (US 6,807,802).



With respect to claim 1, **Platts** teaches a rotor for use in turbine applications comprising: a radial compressor 11 having radially disposed spaced apart fins 11a forming passages, and a

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radial turbine having hollow turbine blades 12a interleaved with said fins and through which fluid from said radial compressor flows. See particularly **Figures 1, 2 and 4** of Platts.

With respect to claim 3, **Platts** teaches rotor is located by a shaft inside a turbine engine housing 20 defining a compressor outlet volute 21 and a turbine inlet scroll 22, wherein said radial compressor compresses air into said compressor outlet volute and heated exhaust air is directed through said hollow radial turbine blades from said turbine inlet scroll, causing said rotor to rotate. See particularly **Figure 4** of Platts.

With respect to claim 4, **Platts** teaches a turbine engine comprising: a turbine engine housing 20, said turbine engine housing having a compressor outlet volute 21 and a turbine inlet scroll 22, a single rotor 10 mounted to a shaft inside said turbine engine housing, said rotor having a radial compressor 11 with axially disposed spaced apart fins 11a forming passages, and an radial turbine having hollow radial turbine blades 12a interleaved with said fins and through which air from said radial compressor flows; wherein said radial compressor compresses fluid into said compressor outlet volute and heated exhaust fluid is directed through said hollow radial turbine blades from said turbine inlet scroll, causing said rotor to rotate. See particularly **Figures 1, 2 and 4** of Platts.

The applied references have a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Platts (US 6,807,802)** in view of **Platts (US 6,430,917)**.

Platts'802 teaches a turbine engine comprising: a turbine engine housing 20, said turbine engine housing having a compressor outlet volute 21 and a turbine inlet scroll 22, a single rotor 10 mounted to a shaft inside said turbine engine housing, said rotor having a radial compressor 11 with axially disposed spaced apart fins 11a forming passages, and an radial turbine having hollow radial turbine blades 12a interleaved with said fins and through which air from said radial compressor flows; wherein said radial compressor compresses fluid into said compressor outlet volute and heated exhaust fluid is directed through said hollow radial turbine blades from said turbine inlet scroll, causing said rotor to rotate (see particularly **Figures 1, 2 and 4** of **Platts'802**). **Platts'802** does not teach magnets and winding positioned on said turbine engine. However, **Platts'917** teaches a turbine engine similar to **Platts'802** and to the one claimed by the invention comprising among other elements, magnets 46 and windings 60 positioned on said turbine engine to provide for the generation of electricity (see particularly **Figure 5** of **Platts'917**). Therefore, a turbine engine designer (one of ordinary skill in the art) at the time the invention was made would have found it obvious to have placed magnets and winding in **Platts'802** turbine engine in order to generate electricity.


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Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S. Thorpe can be reached on 571-272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William H. Rodriguez
Examiner
Art Unit 3746

9/6/05